

**Claims**

1. Fluid flow engine, in particular a fluid flow engine for producing a mass flow, having a central housing part in which a turbine shaft is mounted, wherein the central housing part is integrally molded as part of the turbine housing on the turbine side and as part of a compressor housing on a compressor side; wherein an oncoming flow connection is arranged tangentially to the turbine shaft on the central housing part on the turbine side and an outgoing flow connection is arranged axially on the turbine housing; wherein an outgoing flow connection is arranged tangentially on the central housing part on the compressor side and an oncoming flow connection is arranged axially on the compressor housing; wherein a cover is provided on the compressor side and/or the turbine side, the cover is designed as part of the housing, and the spiral channel for the turbine side and/or the compressor side is provided in the central housing part.

2. Fluid flow engine as claimed in Claim 1, wherein the cover to the central housing part is designed to be essentially planar.

3. Fluid flow engine as claimed in any one of the preceding claims, wherein both spiral channels are formed by parts of the central housing part and the covers.

4. Fluid flow engine as claimed in any one of the preceding claims, wherein the spiral channel has a certain maximum depth in the direction of the turbine shaft, in particular on the turbine side, wherein the cross section may be varied due to widening of the spiral channel in the radial direction to the turbine shaft.

5. Fluid flow engine as claimed in Claim 4, wherein the spiral channels are arranged in any rotatory position in relation to one another owing to their certain maximum depth, so the tangential connections can be positioned at any angle to one another.

6. Fluid flow engine as claimed in any one of the preceding claims, wherein at least one connection is angled and runs parallel to the turbine shaft.

7. Fluid flow engine as claimed in Claim 6, wherein the tangential connections are arranged at a variable angle to the axis of the turbine shaft.

8. Fluid flow engine as claimed in any one of the preceding claims, wherein the tangential connections are arranged on the cover of the turbine side and/or on the cover of the compressor side.

9. Fluid flow engine as claimed in Claim 1, wherein a parting plane is situated essentially centrally in the cross section of the spiral channel between the covers and the central housing part.